

September 08, 2017



U.S. Department
of Transportation

East Building, PHH-30
1200 New Jersey Avenue S.E.
Washington, D.C. 20590

**Pipeline and Hazardous
Materials Safety Administration**

DOT-SP 16521
(FIRST REVISION)

EXPIRATION DATE: 2021-08-31

(FOR RENEWAL, SEE 49 CFR 107.109)

1. GRANTEE: Sentry Equipment Corp.
Oconomowoc, WI
2. PURPOSE AND LIMITATIONS:
 - a. This special permit authorizes the manufacture, mark, sale and use of stainless steel non-DOT specification cylinders designed and manufactured in accordance with ASME Section VIII, Division 1, and which conform in part to the specification DOT 3A. This special permit provides no relief from the Hazardous Materials Regulations (HMR) other than as specifically stated herein. The most recent revision supersedes all previous revisions.
 - b. The safety analyses performed in development of this special permit only considered the hazards and risks associated with transportation in commerce. The safety analyses did not consider the hazards and risks associated with consumer use, use as a component of a transport vehicle or other device, or other uses not associated with transportation in commerce.
3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.
4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR § 173.201, §§ 173.302a, and 173.304a in that non-DOT specification cylinders are not authorized and § 173.301(f) in that each cylinder is not equipped with one or more pressure relief devices, except as specified herein.

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5. BASIS: This special permit is based on the application of Sentry Equipment Corp. dated August 29, 2017 submitted in accordance with § 107.109.
6. HAZARDOUS MATERIALS (49 CFR § 172.101):

Hazardous Material Description			
Proper Shipping Name	Hazard Class/ Division	Identification Number	Packing Group
Compressed gas, flammable, n.o.s.	2.1	UN1954	N/A
Compressed gas, toxic, flammable, n.o.s. <i>Inhalation hazard Zone B*</i>	2.3	UN1953	N/A
Hydrocarbon gas mixture, compressed, n.o.s.	2.1	UN1964	N/A
Hydrocarbon gas mixture, liquefied, n.o.s.	2.1	UN1965	N/A
Methane, compressed or Natural gas, compressed (<i>with high methane content</i>)	2.1	UN1971	N/A
Nitrogen, compressed	2.2	UN1066	N/A
Petroleum crude oil	3	UN1267	I, II, or III
Petroleum gases, liquefied or Liquefied petroleum gas	2.1	UN1075	N/A

*Note: This hazardous material may not be transported aboard aircraft under the terms of this special permit.

7. SAFETY CONTROL MEASURES:

a. PACKAGING -

(1) The two prescribed packagings are non-DOT specification cylinders designed and manufactured in accordance with ASME Section VIII, Division 1.

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(2) The cylinders are constructed of S32760 or S32750 Super Duplex seamless stainless steel pipe and end caps, which are packed with elastomeric seals and are secured with retaining pins.

(3) Cylinders have a maximum allowable working pressure of 1,800 psig, and a minimum test pressure of 3,000 psig.

(4) The maximum water capacity of the cylinders will correspond to one of the following: 2 liters (0.528 gallons), or 4 liters (1.056 gallons).

(5) The cylinders must comply with the design calculations, drawings, material specifications, and engineering specifications submitted with Sentry Equipment Corp.'s special permit application on file with the Office of Hazardous Materials Safety Approvals and Permits Division. In addition, each cylinder must conform to the specification DOT 3A (§§ 178.35 and 178.36) except as follows:

§ 178.35(e) *Safety devices.* No pressure relief device is required on the completed cylinder. The cylinder must be equipped with elastomeric seals.

§ 178.35(f) *Markings.* This paragraph still applies, except that cylinders must be marked "DOT-SP 16521" in lieu of the DOT specification marking. The marking must be clearly visible and no less than 1/8 inches high.

§ 178.36(e) *Welding or brazing.* End collars, per the drawings and calculations submitted with Sentry Equipment Corp.'s special permit application, are allowed to be welded in accordance with ASME Section VIII.

§ 178.36(f) *Wall thickness.* Minimum wall thickness may not be less than 0.186 inches.

§ 178.36(h) *Openings in cylinders and connections (valves, fuse plugs, etc.) for those openings.* This paragraph still applies, except threads are not required for the cylinder end caps.

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§ 178.36(j) *Flattening test*. No flattening test is required.

b. TESTING - Each cylinder must be requalified and hydrostatically retested in accordance with § 180.205 as prescribed for specification DOT 3A cylinders. Reheat treatment or repair of rejected cylinders is not permitted.

c. OPERATIONAL CONTROLS -

(1) Each cylinder must be transported in strong outer packagings. The outer packaging must be able to protect the cylinder valves from breakage or leakage resulting from a drop of 2.0 meters (7 feet) onto a non-yielding surface. Each outer packaging must be marked "DOT-SP 16521".

(2) Emergency response information provided with the shipment, and available via an emergency response telephone number, must indicate that the non-DOT specification cylinders are not fitted with pressure relief devices and provide appropriate guidance in case the cylinders are exposed to fire.

8. SPECIAL PROVISIONS:

a. In accordance with the provisions of Paragraph (b) of § 173.22a, persons may use the packaging authorized by this special permit for the transportation of the hazardous materials specified in paragraph 6, only in conformance with the terms of this special permit.

b. A person who is not a holder of this special permit, but receives a package covered by this special permit, may reoffer it for transportation provided no modification or change is made to the package and it is offered for transportation in conformance with this special permit and the HMR.

c. A current copy of this special permit must be maintained at each facility where the package is offered or reoffered for transportation.

d. Each packaging manufactured under the authority of this special permit must be either (1) marked with the name of the manufacturer and location (city and state) of the

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facility at which it is manufactured or (2) marked with a registration symbol designated by the Office of Hazardous Materials Special Permits and Approvals for a specific manufacturing facility.

- e. A current copy of this special permit must be maintained at each facility where the packaging is manufactured under this special permit. It must be made available to a DOT representative upon request.
9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle, rail freight, cargo vessel, and cargo aircraft only (see additional restrictions in paragraph 6.).
10. MODAL REQUIREMENTS: A current copy of this special permit must be carried aboard each cargo vessel, aircraft or motor vehicle used to transport packages covered by this special permit. The shipper must furnish a copy of this special permit to the air carrier before or at the time the shipment is tendered.
11. COMPLIANCE: Failure by a person to comply with any of the following may result in suspension or revocation of this special permit and penalties prescribed by the Federal hazardous materials transportation law, 49 U.S.C. 5101 et seq:
- o All terms and conditions prescribed in this special permit and the Hazardous Materials Regulations, 49 CFR Parts 171-180.
 - o Persons operating under the terms of this special permit must comply with the security plan requirement in Subpart I of Part 172 of the HMR, when applicable.
 - o Registration required by § 107.601 et seq., when applicable.

Each "Hazmat employee", as defined in § 171.8, who performs a function subject to this special permit must receive training on the requirements and conditions of this special permit in addition to the training required by §§ 172.700 through 172.704.

No person may use or apply this special permit, including display of its number, when this special permit has expired or is otherwise no longer in effect.

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Under Title VII of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)—"The Hazardous Materials Safety and Security Reauthorization Act of 2005" (Pub. L. 109-59), 119 Stat. 1144 (August 10, 2005), amended the Federal hazardous materials transportation law by changing the term "exemption" to "special permit" and authorizes a special permit to be granted up to two years for new special permits and up to four years for renewals.

12. REPORTING REQUIREMENTS: Shipments or operations conducted under this special permit are subject to the Hazardous Materials Incident Reporting requirements specified in 49 CFR §§ 171.15 Immediate notice of certain hazardous materials incidents, and 171.16 Detailed hazardous materials incident reports. In addition, the grantee(s) of this special permit must notify the Associate Administrator for Hazardous Materials Safety, in writing, of any incident involving a package, shipment or operation conducted under terms of this special permit.

Issued in Washington, D.C.:



for William Schoonover
Associate Administrator for Hazardous Materials Safety

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Pipeline and Hazardous Materials Safety Administration, U.S. Department of Transportation, East Building PHH-30, 1200 New Jersey Avenue, Southeast, Washington, D.C. 20590.

Copies of this special permit may be obtained by accessing the Hazardous Materials Safety Homepage at http://hazmat.dot.gov/sp_app/special_permits/spec_perm_index.htm Photo reproductions and legible reductions of this special permit are permitted. Any alteration of this special permit is prohibited.

PO: Teresa D'Onfro